NOV 23. 2804 1:293M ARTHUR POLOGS Amendments to the Claims Claims 1-9 (Cancelled) (Currently Amended) A tuning-fork type vibration gyro having comprising: 10. a ferrdelectric tuning-fork vibration body generating a sensor signal; and a sensor circuit to which [[a]] the sensor signal generated by [[a]] the tuning-fork type vibration body is input, said sensor circuit comprising including: a differential amplifier having two input terminals between to which said sensor signal is input; and a capacitor or a voltage limiting element being connected between the two input to terminals of said differential amplifier. (Currently Amended) The tuning-fdik type vibration dyro according to 11. claim 40 19 wherein each of said voltage limiting elements element is a Zener diode[[,]] and said and said Zener diode, said capacitor and said differential amplifier are integrated into one piece. (Currently Amended) A tuning-fork type vibration gyro having comprising: 12. a ferrbelectric tuning-fork vibration body generating a sensor signal; and a sensor circuit to which [[a]] the sensor signal generated by [[a]] the tuning-fork type vibration body is input, said sensor circuit emprising including: a differential amplifier having two input terminals between to which said sensor signal is input; and Application No. 10/625,568 -2-Attorney Docket No. 108066-00088

two inductors, each being connected in series to each of the input terminals of said differential amplifier.

13. (Currently Amended) The tuning-fork type vibration gyro according to claim 10, 12, 18 or 19, wherein said differential amplifier comprises[[:]] is formed in an integrated circuit and includes:

a first stage transistor having two transistors being differentially connected; succeeding stages having transistors connected to the first stage; and [[a]] guard electrodes, each surrounding each of the two transistors of the first stage and being connected to a ground potential, that prevent pyroelectric noise from flowing from the transistors of the first stage to the transistors of the succeeding stages electrode for separating said first stage transistor from transistors in succeeding stages.

- 14. (Canceled)
- (Currently Amended) The [[A]] tuning-fork type vibration gyro according to 15. claim 10, 12, 18 or 19, comprising:

wherein [[a]] the tuning-fork type vibration body has having two arms disposed in parallel and a base for commonly supporting one end of said each arm, wherein a longitudinal direction of said two arms being is defined as a z-axis and a perpendicular direction to the two arms being thereto is defined as an x-axis,[[;]] and further comprising:

a sensor circuit to which the [[a]] sensor signal generated by said tuning-fork type vibration body is input;[[,]]

wherein said tuning fork type vibration body further comprises:

driving electrodes respectively formed on said two arms for generating vibration of said two arms in a direction parallel to said x-axis;

detecting electrodes respectively formed on said two arms for detecting electromotive force generated when said tuning-fork type vibration body rotates around said z-axis; and

dummy electrodes formed on said two arms in respective areas different from said driving electrodes and said detecting electrodes[[,]] and,

said-sensor circuit comprises:

a differential amplifier to which said sensor signal is input; and
a capacitor or a voltage limiting element being connected to input terminals of
said differential amplifier.

16. (Withdrawn) An electrode trimming method for a tuning-fork type vibration gyro having two or more arms and a base for supporting said arms, driving electrodes and/or detecting electrodes respectively formed on said arms, and a support substrate for supporting said tuning-fork type vibration body on said base, said electrode trimming method comprising the steps of:

when defining a parallelly disposed direction of said arms as an x-axis, suppressing vibration of said support substrate while vibration of said arms in a direction

parallel to said x-axis is excited by a predetermined drive power applied to said driving electrodes; and

adjusting areas of said detecting electrodes so that a sensor signal output from said detecting electrodes is decreased.

17. (Withdrawn) The electrode trimming method for the tuning-fork type vibration gyro according to claim 16,

wherein said vibration of the support substrate is suppressed by a pressing jig formed of a rubbery elastic body.

18. (New) A tuning-fork vibration gyro comprising:

a ferroelectric tuning-fork vibration body generating a sensor signal; and a sensor circuit to which the sensor signal generated by the tuning-fork vibration body is input, said sensor circuit including:

a differential amplifier having two input terminals between which said sensor signal is input; and

two capacitors, each having one end connected to a respective one of the two input terminals of the differential amplifier and a second end commonly connected to a ground potential.

19. (New) A tuning-fork vibration gyro comprising:

a ferroelectric tuning-fork vibration body generating a sensor signal; and

a sensor circuit to which the sensor signal generated by the tuning-fork vibration body is input, said sensor circuit including:

a differential amplifier having two input terminals between which said sensor signal is input; and

two voltage limiting elements, each having one end connected to a respective one of the two input terminals of the differential amplifier and a second end commonly connected to a ground potential.

Michele Connell

donnell.michele@arentfox.com

202 857,6104 DIRECT 202.857.6395 FAX

Facsimile

Date:

November 23, 2004

Pages (including cover): 2

Attorney #:

2117

Client.Matter #:

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United States Patent and Trademark

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Confirmation No.: 8111

In re the Application of:

OHTA et al.

Serial No.: 10/625,568

Filed: July 24, 2003

TUNING-FORK TYPE VIBRATION GYRO AND ELECTRODE TRIMMING For:

Could

Examiner: J. Chapman, Jr.

Art Unit: 2856

Docket No.: 108066-00088

METHOD THEREFOR

Dear Ms. Surles,

In accordance with our telephone conversation of November 23, 2004, attached hereto is a new page 2 of the Response to the Notice of Non-Compliant Amendment filed on November 12, 2004. Thank you for your assistance in this matter.

Very truly yours,

Michele L. Connell

Reg. No. 52,763

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